

REMARKS

The Official Action mailed March 8, 2006, has been received and its contents carefully noted. This response is filed within three months of the mailing date of the Official Action and therefore is believed to be timely without extension of time. Accordingly, the Applicant respectfully submits that this response is being timely filed.

The Applicant notes with appreciation the consideration of the Information Disclosure Statements filed on December 8, 2003; August 23, 2004; and January 21, 2005.

Claims 6-22 were pending in the present application prior to the above amendment. New claims 23-28 have been added to recite additional protection to which the Applicant is entitled. Accordingly, claims 6-28 are now pending in the present application, of which claims 6, 12, 17 and 23 are independent. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

The Official Action rejects claims 6-22 as obvious based on the combination of U.S. Patent No. 5,250,214 to Kanemoto and U.S. Patent No. 4,878,742 to Ohkubo.

Please note, although Ohkubo appears for the first time in the Official Action, it does not appear that Ohkubo was cited by the Examiner on a Form PTO-892 or by the Applicant in an Information Disclosure Statement. Since it appears that the Examiner introduced Ohkubo, the Applicant respectfully requests that Ohkubo be properly cited on a Form PTO-892 in a subsequent communication.

The Applicant respectfully traverses the rejection because the Official Action has not made a *prima facie* case of obviousness.

As stated in MPEP §§ 2142-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the

prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

There is no suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify Kanemoto and Ohkubo or to combine reference teachings to achieve the claimed invention. MPEP § 2142 states that the examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. It is respectfully submitted that the Official Action has failed to carry this burden. While the Official Action relies on various teachings of the cited prior art to disclose aspects of the claimed invention and asserts that these aspects could be used together, it is submitted that the Official Action does not adequately set forth why one of skill in the art would combine the references to achieve the features of the present invention.

The test for obviousness is not whether the references "could have been" combined or modified as asserted in the Official Action, but rather whether the references should have been. As noted in MPEP § 2143.01, "The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination." In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990) (emphasis in original). Thus, it

is respectfully submitted that the standard set forth in the Official Action is improper to support a finding of *prima facie* obviousness.

The Official Action concedes that Kanemoto does not teach "a display device having spacing between the pair of substrates being less than $3.5\mu\text{m}$; and said pair of orientation films having antiparallel orientation directions to each other" (page 3, Paper No. 20060304). The Official Action relies on Ohkubo to allegedly teach "forming a display device having spacing between the pair of substrates in the range of 1.5 to $3\mu\text{m}$... for substantial extinguishment of the diffraction" (Id.). The Official Action asserts the following (Id.):

Therefore, it would have been obvious for one having ordinary skill in the art to modify Kanemoto et al. display device with the space between the substrates being less than $3.5\mu\text{m}$, and having orientation directions on said pair of orientation films being antiparallel to each other. Doing so would substantial extinguishment of the diffraction in Kanemoto et al. display device. The extinguishment of diffraction would be uniform and no disturbance based on reverse tilt, etc. will be observed, as taught by Ohkubo et al.

The Applicant respectfully disagrees and traverses the above assertions in the Official Action.

The Applicant respectfully submits that the Official Action does not show sufficient motivation for the alleged combination of Kanemoto and Ohkubo. The Official Action seems to take the position that it would have been obvious to modify Kanemoto such that Kanemoto has a space between the substrates of less than $3.5\mu\text{m}$ and such that Kanemoto has antiparallel orientation directions on a pair of orientation films. The Official Action appears to take the position that "substantial extinguishment of the diffraction" is motivation for the combination.

However, extinguishment of diffraction in Ohkubo is not due to a space between substrates being less than $3.5\mu\text{m}$ or due to having antiparallel orientation directions. Rather, extinguishment of diffraction in Ohkubo appears to relate to an application of a voltage to liquid crystals 16' and 16'' aligned by the homogeneous alignment ability

region 14 and the homeotropic alignment ability region 15, respectively, (see column 4, lines 56-62, and Figures 1A and 1B, for example).

Also, please note that Ohkubo describes that "the rubbing direction be antiparallel to each other" and that "the above orientation treated region comprises a uniaxially symmetrical pattern having directionality" (column 8, lines 1-11). However, Ohkubo does not teach or suggest that antiparallel orientation directions should be employed in order to achieve extinguishment of diffraction.

Further, regarding independent claim 12, the Official Action does not demonstrate how the prior art teaches or suggests that a liquid crystal comprises molecules aligned substantially in one direction throughout a thickness of a liquid crystal layer. The Applicant respectfully submits that the alleged combination of Kanemoto and Ohkubo does not teach or suggest the above-referenced features of claim 12.

Still further, regarding dependent claims 8, 14 and 19, without any apparent support from the prior art references or a demonstration of the level of ordinary skill in the art at the time of the present invention, the Official Action asserts that "it would have been obvious for one having ordinary skill in the art to modify Kanemoto display in view of Ohkubo with a reflection layer on a surface of the lower substrate for reflecting ambient light" (page 4, Paper No. 20060304; emphasis added). The Applicant respectfully disagrees and traverses the above-referenced assertions in the Official Action.

The Applicant notes that reference numerals 11 and 22 in Figures 2-4 of Kanemoto refer to transparent electrodes and reference numerals 13, 13', 23 and 23' in Figures 1A-2C of Ohkubo refer to transparent electrodes. The Official Action has not provided any teaching or suggestion that would indicate why one of ordinary skill in the art at the time of the present invention would have been motivated to convert the transparent-type devices of Kanemoto and Ohkubo into reflective-type devices, or why one would have been motivated to employ a reflection layer on a surface of a lower substrate for reflecting ambient light in either Kanemoto or Ohkubo.

It is not sufficient to merely point out the advantages of two references and assert that it would have been obvious to combine the two references so that you can have both advantages in one device. Rather, in order to form a *prima facie* case of obviousness, the Official Action must show why the references should have been combined.

Therefore, the Applicant respectfully submits that the Official Action has not provided a proper or sufficient suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify Kanemoto and Ohkubo or to combine reference teachings to achieve the claimed invention.

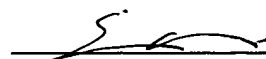
In the present application, it is respectfully submitted that the prior art of record, either alone or in combination, does not expressly or impliedly suggest the claimed invention and the Official Action has not presented a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.

For the reasons stated above, the Official Action has not formed a proper *prima facie* case of obviousness. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

New claims 23-28 have been added to recite additional protection to which the Applicant is entitled. For the reasons stated above and already of record, the Applicant respectfully submits that new claims 23-28 are in condition for allowance.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,



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